Advanced Mine Detector

OBJECTIVE:

- Develop a man-portable advanced mine detector (AMD)
- Capable of detecting metallic and nonmetallic buried mines
- Using Nuclear Quadrupole Resonance (NQR) technology

PAYOFF:

- Detection of multi-compound explosives (TNT/RDX/Tetryl)
- Detection of metal
- Discrimination of buried mines from clutter (metal objects, rocks, voids)
- Low false alarm rate from buried clutter
- Detection of mines through water and in wet soil conditions

TECHNICAL APPROACH:

- Three-Year Program
- S&T Phase Integrates
  - NQR Sensor
  - Metal Detection Sensor
  - Ground Penetrating Radar Sensor
  - Extensive testing
- Prototype Phase
  - Transitions the Integrated Sensors into Man-Portable NQR-based AMD

PERFORMER: Quantum Magnetics, Inc., San Diego, CA. Cost plus fixed fee contract awarded April 2003.

CONGRESSIONAL INTEREST: Current contract funded mostly by Congressional plus-up

TRANSITION: FY06

OPERATIONAL REQUIREMENTS DOCUMENT (ORD):
Advanced Mine Detector (AMD) (NO. LOG 214)

MISSION NEED STATEMENT (MNS):
This requirement is supported by MNS number LOG 214,
Dated 21 September 1992